



NTP
National Toxicology Program

Contract Concept Review: In Vivo Toxicology and Carcinogenicity Studies

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Background:

- General Toxicity and Carcinogenicity studies are a substantial portion of the NTP's focus, budget, and product
- In the past, these studies have centered on a central paradigm:
 - 14-day (repeat dose)
 - 90-day (subchronic)
 - 2-year (chronic)
 - Started approximately 6 chronics/year and approximately 17 subchronics/yr (based on the last 5 years)
- Conducted through contracts because of facility and personnel requirements and the need to use FDA GLP guidelines
- Findings from NTP toxicology and carcinogenicity studies are considered authoritative by groups worldwide



Generally, our standard study designs remain the same with the following additions:

- In an effort to better address human exposure we have added study designs that include perinatal exposure
- To address mechanistic issues, we save tissues for several uses such as toxicogenomics studies and for specific toxicity endpoints
- To better utilize resources, we are examining 90-day studies with a view to providing improved triggers for the conduct of other specialized follow-on studies. For example:
 - Spleen, thymus, and hematology for immunotoxicity evaluation
 - SCVCE (Sperm Count and Vaginal Cytology Evaluation) and tissues such as testis and uterus for reproductive toxicity
- Less standard designs are used to address specific questions (Changes in the QT interval, studies of cardiotoxicity, studies of adenoviral vectors)



Request

- NTP has a continued need to conduct toxicology and carcinogenicity studies in rodents to characterize the hazard potential of agents of public health concern
- NTP seeks the BSC's approval for continuing to use contract mechanisms for this this type of activity